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DISCUSSION

Dr York N. Hsiang (*Vancouver, BC, Canada*). Lower extremity wounds are different with respect to their etiologies and can at times be treated with seemingly contradictory management strategies. In this study, the authors examined 94 chronic wounds after skin grafting. The common denominators were skin grafts. Overall, 69% of patients healed their wounds with skin grafts. The authors did not explain why the other 31% did not heal. Comparisons between type and location of the ulcer showed no difference. I have the following questions:

1. What is the definition of "high-risk diabetic feet?"
2. Why were nondiabetic wounds used as the comparison group? Nondiabetic wounds, such as venous ulcers, have a different etiology, pathophysiology and prognosis compared with diabetic ulcers. So, isn't this a comparison of apples vs oranges?
3. What type of diabetic wounds were examined; were they neuropathic, mixed, or of ischemic etiologies? Presumably, the mixed and ischemic diabetic ulcers had their underlying ischemia corrected.
4. For plantar wounds, were they on a weight-bearing surface or not?
5. What were the healing rates for split-thickness skin grafts (STSGs) placed on weight-bearing compared with non-weight-bearing surfaces in diabetic patients?
6. What were the recurrence rates of these ulcers?

Dr Jessica F. Rose. Thank you very much for the questions.

1. We defined patients as "high risk" in this population that had diabetes with active wounds requiring surgical intervention. Indeed, risk for limb loss is a spectrum—ranging from the non-neuropathic low-risk patient with diabetes to a patient with severe peripheral arterial disease and ESRD. It is in part to better define this term that compelled members of our research team and other members of the Society for Vascular Surgery to create an updated threatened limb classification system for the at-risk limb based on the factors of Wound, Ischemia, and degree of Foot Infection, colloquially known as WIfI.
2. We abstracted records from our patient population undergoing STSGs to heal chronic wounds. We realize that these wounds have a very different etiology. Historically, STSGs were considered to be relatively contraindicated as a method to heal diabetic, plantar wounds. We sought to see if this population had more difficulty healing than those with other chronic wounds in a sample treated consistently by surgeons in a closely-knit clinical and research team. These patients were the logical comparison groups based on our study design. Future prospective work might allow us to draw conclusions without mixing various types of clinical fruits and vegetables.
3. We examined all different types of diabetic wounds. Those that were ischemic had the malperfusion corrected before STSG placement. We did analyze whether preoperative correction had any effect on our study population.
4. Based on our registry, we could only determine if the wounds were on the plantar surface or not, but we lacked sufficiently specific information to determine if the index wound was truly over the weight-bearing area. Therefore, those on the plantar surface were presumed to be weight-bearing. However, the essence of our interdisciplinary team consisting of vascular and podiatric surgeons, as well as orthotists and prosthetists, is to focus on spreading a potentially deleterious force out over a larger unit area. This approach mitigates pressure and, we believe, mitigates risk by increasing likelihood for healing.
5. We found that 66.7% of those with plantar wounds and 74.1% of nonplantar wounds were healed. These values were not clinically or statistically significantly different ($P = .5$)
6. We did not have any recurrences during the duration of the study. That is the subject for future works that our unit is currently undertaking. We believe strongly that durability of correction depends on a number of factors. One such factor may be the viscoelastic characteristics of skin, but just as much may be the characteristics of shoe gear modification and activity prescription.